IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:	Jagadish Bandhole, Sekaran Nanja, Shan Balasubramaniam		
Assignee:	Symantec Operating Corporation		
Title:	Collaborative Computing Systems Using Dynamic Computing Environments		
Application No.:	09/888,110	Filing Date:	June 22, 2001
Examiner:	Kristie D. Shingles	Group Art Unit:	2141
Docket No.:	VRT0074US	Confirmation No.:	7964

Austin, Texas
May 7, 2008

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Dear Sir:

Applicants hereby request review of the final rejection, mailed February 7, 2008, in the above-identified application with a shortened statutory period set to expire May 7, 2008. This Request is being filed concurrently with a Notice of Appeal Under 37 CFR § 41.31. No amendments are being filed with this request. This review is requested for the reasons set forth below.

REMARKS

Claims 1-4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Raja et al. (USPN 7,058,947) ("Raja") in view of VMware, Inc., Technical White Paper, February 1999 ("VMware"). Applicants respectfully traverse this rejection.

Claim 1 recites: "sharing the at least one resource between the first user interface and a second user interface," "transferring information generated by execution of the application to the first user interface," and "transferring the information generated by execution of the application to the second user interface in response to a command to collaborate with the second user interface, wherein the first user interface and the second user interface are at least in part provided by software executing on respective first and

second devices separate from the dynamic computing environment." The Final Office Action mailed February 7, 2008 (hereinafter referred to as "FOA") notes that Raja fails to teach these features, and thus relies solely upon VMware to teach these features of claim 1. FOA, p. 4.

VMware, both alone and in combination with the cited portions of Raja, fails to teach or suggest sharing a resource between a first and a second user interface. None of the cited portions of VMware mention anything about multiple user interfaces, or about sharing a resource between multiple user interfaces. At best, VMware states that virtual machines can share files and devices (VMware, p. 1, paragraph 3) and that the application portion of Virtual Platform acts like a normal application to use the graphical user interface of the host operating system to administer virtual machines (VMware, p. 4, paragraph 2).

Furthermore, the host operating system's user interface (mentioned on page 4 of VMware) is the only user interface mentioned in the cited portions of VMware, and thus the reference clearly only discloses a single user interface. As such, the reference clearly does not teach or suggest sharing a resource among multiple user interfaces, since only a single user interface is disclosed.

In response to the above arguments, the FOA asserts that "VMware clearly teaches users sharing resources between multiple interfaces of virtual machines by allowing multiple operating systems to run concurrently using the same hardware resources; which allows for the virtual machines to share files and devices." FOA, p. 2. However, it is irrelevant that the virtual machines share files and devices, since the virtual machines are not user interfaces of the type recited in claim 1.

Furthermore, if the virtual machines run concurrently using the same hardware resources, as alleged in the FOA, then the virtual machines are clearly not "at least in part provided by software executing on respective first and second devices separate from the dynamic computing environment." In other words, the virtual machines run on the same hardware resources, not on different (first and second) devices in the manner of the user interfaces of claim 1.

For a similar reason, the cited portions of VMware, both alone and in combination with the cited portions of Raja, fail to teach or suggest that the first user interface and the second user interface are at least in part provided by software executing on respective

first and second devices separate from the dynamic computing environment. As noted above, only a single user interface is disclosed in the cited portions of VMware. Furthermore, the cited portions of VMware only disclose a single device. Figures 1 and 3 clearly show only a single device running the VMware Virtual Platform (TM), and Figure 2 appears to simply illustrate different configurations of a single machine running Virtual Platform. Thus, VMware shows only a single device and does not describe how different user interfaces could be implemented on different devices in a manner consistent with that recited in claim 1.

Finally, VMware, both alone and in combination with the cited portions of Raja, fails to teach or suggest transferring information generated by execution of the application to the second user interface in response to a command to collaborate with the second user interface. Nothing in the cited portion of VMware describes or suggests a command to collaborate, nor does the cited portion of VMware suggest performing any action, let alone the action of transferring information generated by executing an application, in response to such a command.

In response to the above arguments, the FOA restates the assertion that "VMware clearly teaches allowing multiple operating system environments to run concurrently using the same hardware resources wherein virtual machines are allowed to share files... which clearly implies the transferring of information from programs running in one virtual machine environment to another virtual machine environment." FOA, p. 2. However, this ignores several features of claim 1. First, claim 1 recites that information is transferred to a user interface, not to a virtual machine. Accordingly, it is irrelevant that VMware teaches transferring information between virtual machines, since those virtual machines are not user interfaces. Secondly, as noted above, the user interfaces of claim 1 are implemented on different devices, while the virtual machines of VMware appear to run on the same hardware.

Finally, claim 1 states that the information is transferred in response to a command to collaborate. No such command is disclosed in either reference, and the FOA does not cite any section of either reference as teaching such a command. Accordingly, without teaching such a command, and the transferring of information in response to such a command, the combined references clearly fail to teach or suggest the features of claim 1.

Accordingly, claim 1 is patentable over the cited art for at least the foregoing reasons. Dependent claims 2-4 are patentable over the cited art for similar reasons.

Claims 5-14 and 18-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over VMware in view of McNally et al. (USPN 6,259,448) ("McNally"). Applicants respectfully traverse this rejection.

With respect to claim 5, the cited art fails to teach or suggest "using a resource computer to transmit information about execution of the process to the first user computer, wherein the resource computer executes the process in a first location, and a first user operates the first user computer in a second location; and using the resource computer to transmit information about the execution of the process to the second user computer, wherein a second user operates the second user computer in a third location, and the first user computer and the second user computer comprise the distributed computing environment."

The Office Action relies upon pages 4 and 5 of VMware to teach these features of claim 5. Office Action, p. 4. However, these portions of the reference merely describe how the components of the Virtual Platform interact (page 4) and that the Virtual Platform can be used to assign various I/O devices to virtual machines (page 5). In particular, the VMware Virtual Platform (TM) includes an application, which executes on top of the operating system, a monitor, which executes beneath the operating system, and a driver, which is part of the operating system and facilitates communication between the application and monitor. VMware, page 4.

Nothing in the cited portion of VMware teaches or suggests transmitting information about the execution of a process on one computer (or even one virtual machine) to multiple other computers (or other virtual machines). At best, the reference says: "During execution, the monitor calls back to the application to access system resources. The application then calls the host operating system to access these resources." VMware, page 4, paragraph 2. As shown in Figure 3 of VMware, the Virtual Platform components do not execute on different machines (virtual or otherwise); instead the Virtual Platform (VP) applications and monitor execute on the same device and are independent of the virtual machines implemented on that device. Thus, VMware clearly does not teach or suggest transmitting information about the execution of a process from one computer or virtual machine to another; instead, it merely describes two software

components on the same device communicating with each other in order to support one or more virtual machines.

For at least this reason, the cited art fails to teach or suggest using a resource computer to transmit information about execution of the process to the first user computer and using the resource computer to transmit information about the execution of the process to the second user computer. These features is also not taught or suggested in McNally (which is not relied upon in the rejection of claim 5).

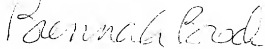
In response to the above arguments, the FOA cites p. 2 of VMWare as teaching "transferring data of an 'entire computing environment' between computers." FOA, p. 3. The cited section of VMWare states: "Encapsulate an entire computing environment and move it between computers as easily as copying a file." This clearly does not teach the scenario of claim 5, which involves transferring information about the execution of a process on one computer from the computer on which the process is executing to two other user computers. The "entire computing environment" does not appear to be information about the execution of a process, nor is the entire computing environment transferred in the specific manner recited in claim 5. Accordingly, claim 5 and its dependent claims 6-14 are patentable over the cited art for at least the foregoing reasons. Claims 18-21 are patentable over the cited art for similar reasons.

Claims 15-17 and 22-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over VMware in view of McNally and further in view of Ansberry et al. (USPN 5,887,170) ("Ansberry"). Applicants respectfully traverse these rejections for at least the reasons set forth above with respect to claims 5 and 18.

CONCLUSION

Applicants assert that the application is in condition for allowance and respectfully request that a finding withdrawing the final rejection of the claims be issued.

Respectfully submitted,



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